

DETAILED ACTION

Acknowledgements

1. This Office Action is in response to amendments filed on July 20, 2009. Claims 1, 3, 5, 7, 8, 9, are 10 are amended. Claim 4 is cancelled. Claims 11 and 12 are newly added.
2. Claims 1-3 and 5-12 are currently pending and are rejected.

Response to Arguments

3. Applicant's arguments filed July 20, 2009 have been fully considered but they are not persuasive.

Applicant is of the first opinion that Claim 8 has fulfilled U.S.C. §101 requirements. Examiner respectfully disagrees. Specifically, in determining a sufficient tie to structure or machine for a method claim, the tie can not be directed to mere extra-solution activity. See *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008). In the instant application, Claim 8 merely directs the mutual authentication to a processor in an apparatus, but is silent as to how the method steps of generating encryption key, decrypting content, recording content, reproducing decrypted content, using key information, and transmitting encrypted content are tied to specific structure or machine for performing the claimed method.

Applicant is of the second opinion that the scope of Claim 1 is consistent (Applicant's Remarks, p. 8). Examiner respectfully disagrees. Specifically, Applicant's limitations are directed to functions and action being done by apparatus executing first

and second execution files. These functions can not be performed by the computer-readable storage medium alone and require an apparatus to accomplish. Therefore, it is unclear whether Applicant is merely claiming a medium product, as disclosed in the preamble of the claim, or claiming a system of components and structures to achieve the recited limitations. The scope of the claim remains unclear and the previous U.S.C. §112 rejection is maintained.

Applicant is of the third opinion that “digital signature information attached to said content” does not require antecedent basis (Applicant’s Remarks, p. 9). Examiner respectfully disagrees. Specifically, the uncertainty stems from the term “attached”, which can be reasonably interpreted as a participle acting as an adjective or interpreted as the preterit of the verb “attach”. When taken as the simple past tense of “attach”, as understood by Examiner, the claim then lacks the previous recitation of an action or event of attaching the signature information. Thus, the antecedent support for the limitation is unclear and the previous U.S.C. §112 rejection is maintained.

Applicant is of the fourth opinion that all remaining informalities have been corrected (Applicant’s Remarks, p. 9). Examiner respectfully disagrees. Specifically, partial U.S.C. §112 rejections regarding Claims 1, 2, 5, 6, 7, and 8 are maintained as amendments to the claims are not sufficient to overcome the rejection.

4. Applicant’s other arguments with respect to claims 1-3 and 5-12 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claims 8-10** rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Concerning Claim 8, Applicant's method claim is non-statutory for failing the machine-or-transformation test. Based on Supreme Court precedent (See also *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) and recent Federal Circuit decisions, in order for a method to be considered a "process" under 35 U.S.C. §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In addition, the tie to a particular apparatus, for example, cannot be mere extra-solution activity. See *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps.

To meet prong (1), the method step should positively recite the other statutory class (the thing or product) to which it is tied. This may be accomplished by having the claim positively recite the machine that accomplishes the method steps. Alternatively or to meet prong (2), the method step should positively recite identifying the material that is

being changed to a different state or positively recite the subject matter that is being transformed.

In this particular case, Claim 8 fails prong (1) because tie to structure or machine is directed to mere extra-solution activity. Additionally, the claim fails prong (2) because the method steps do not transform the underlying subject matter to a different state or thing.

As to Claims 9-10, see discussion of Claim 8 above. These depending claims inherit the same U.S.C. §101 deficiency as Claim 8 and are rejected in the like manner above.

Claim Rejections - 35 USC § 112, Second Paragraph

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 1-3 and 5-12** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Unclear Scope of Invention

Regarding Claim 11, Applicant recites “wherein said second execution file is not stored on said computer-readable storage medium” in the limitation. The claims language is further limiting a second file. However, in this claim, the limitations clearly establish that the second file is not on the computer-readable medium. The limitation conflicts with the scope set forth in the preamble of Claim 1, e.g. “A computer-readable storage

medium, comprising”. This renders the scope of this claim to be unclear to one of ordinary skill in the art.

Regarding Claim 12, Applicant recites “computer-readable storage medium” in the preamble of the claim. However, the limitations following the preamble are further describing an apparatus and functions of the apparatus. The structure or mechanics of the claimed medium can not be found. The scope of the invention is unclear to one of ordinary skill in the art.

(b) Unclear Language

Regarding Claims 1, 2, 5, 7 and 8, Applicant recites “unique key information ... to encrypt encryption key information for encrypting digital signature information attached to said encrypted content” in the limitations. The amended claim language, however, is unclear to one of ordinary skill in the art as the language does not explicitly point out whether digital signature information is encrypted using “encryption key information” or “unique key information encrypted encryption key information” (*In re Zletz*, 13 USPQ2d 1320 (Fed. Cir. 1989)).

Regarding Claim 5, Applicant recites “recording, with the information processing apparatus, said content on said computer readable storage medium” in the limitation. However, the amended language is unclear as to whether the apparatus is recording “to” the medium or “from” the medium. The claim limitation is unclear to one of ordinary skill in the art.

Regarding Claim 6, Applicant recites “one of said computer-readable storage medium, in said information processing apparatus, and in a different information

processing apparatus” at line 2 of the claim. The claim language, however, is unclear to one of ordinary skill in the art as the claim does not explicitly point out whether “in said information processing apparatus” is a destination for recording or is it merely describing where the medium is located. In other words, it is unclear whether the phrase is a parenthetical phrase or items in a list.

(c) Unclear Antecedent Support

Regarding Claims 1, 5, and 8, Applicant recites “encrypting digital signature information attached to said encrypted content” in the limitation. However, it is unclear at which step is the act of attaching information being performed. The limitations are unclear to one of ordinary skill in the art to determine the metes and bound of the claimed invention.

Regarding Claim 1, Applicant recites “wherein the instructions in said first execution file” at line 10 of the claim. It is unclear whether the phrase is referring to instructions found at lines 4, 6, or 8 of the claim and renders the claim unclear to one of ordinary skill in the art.

Regarding Claim 5, Applicant recites “unique key information obtained from said first execution file” at line 9 of the claim. The previous act of obtaining unique key information can not be found. **Further,** Applicant recites “and said instructions for transmitting cause” at line 18 of the claim. It is unclear whether the phrase is referring to instructions found at lines 7, 10, or 11 of the claim and renders the claim unclear to one of ordinary skill in the art. There is insufficient antecedent basis for this limitation in the claim.

Regarding Claim 8, Applicant recites “unique key information obtained from said first execution file” at line 8 of the claim. The previous act of obtaining unique key information can not be found. **Further**, Applicant recites “said content” at line 11 of the claim. It is unclear whether this phrase refers to encrypted content or is referring to a different content. There is insufficient antecedent basis for this limitation in the claim.

(d) Depending Claims

As to Claims 3, 9, and 10, see discussion of Claim 1 above. These depending claims inherit the same U.S.C. §112 second paragraph deficiencies as Claim 1 and are rejected in the like manner above.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-3, 5-7, and 12 rejected under 35 U.S.C. 102(b) as being anticipated by Rodgers et al., U.S. Patent Application Publication No. 2002/0026478 A1 (hereinafter Rodgers).

With respect to Claims 1-3 and 12, Rodgers discloses a computer-readable medium comprising program code (see Rodgers, ¶170).

Further, it has been held stored data is not functionally related to the memory in which it is stored and does not distinguish the claimed apparatus, method, and system from the prior art (*In re Gulack*, 217 USPQ 401 (Fed. Cir. 1983); *In re Ngai*, 70 USPQ2d

(Fed. Cir. 2004); *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.01). All the limitations in Claims 1-3 and 12 and are directed to stored data, and are not given patentable weight for the purpose of prior art examination.

With respect to Claims 5-7, Rodgers discloses an information processing apparatus comprising a processor (see Rodgers, ¶169) and program code (see Rodgers, ¶170).

Further, it has been held stored data is not functionally related to the memory in which it is stored and does not distinguish the claimed apparatus, method, and system from the prior art (*In re Gulack*, 217 USPQ 401 (Fed. Cir. 1983); *In re Ngai*, 70 USPQ2d (Fed. Cir. 2004); *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.01). In Claim 5, limitations following “a second execution file for reproducing an encrypted content” are not given patentable weight for the purpose of prior art examination. All the limitations of Claims 6-7 are not given patentable weight for the purpose of prior art examination.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. **Claims 1-3 and 5-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al., U.S. Patent Application Publication No. 2003/0152222 A1 (hereinafter Nakano'222) in view of Danneels et al., U.S. Patent No. 6,272,472 B1 (hereinafter Danneels), Nakano et al., U.S. Patent Application Publication No. 2004/0243814 (hereinafter Nakano'814), and Matsuyama et al., U.S. Patent Application Publication No. 2002/0026581 A1 (hereinafter Matsuyama).

With respect to Claims 1, 5, 8, and 12, Nakano'222 discloses:

a first execution performing an authentication process with a second execution
(see Nakano'222, ¶98-100; also see ¶61-65);

obtaining unique key information unique to said first execution (see Nakano'222, ¶76; also see ¶45-46, ¶61); and

transmitting said unique key information to said second execution (see Nakano'222, ¶76);

wherein the first execution is executed by an information processing apparatus (see Nakano'222, ¶76; also see ¶7 and ¶95), and said second execution generates a content key from said transmitted unique key information, decrypts encrypted content using the content key, and reproduces the decrypted content (see Nakano'222, ¶100-102; also see ¶70-72); and

wherein said encrypted content is recorded on said computer-readable storage medium (see Nakano'222, ¶48) and said unique key information is configured to encrypt encryption key information (see Nakano'222, ¶58; also see ¶84-89) for a digital signature attached to said encrypted content (see Nakano'222, ¶92-93), and said instructions for transmitting cause said encrypted content to be transmitted to said second execution (see Nakano'222, ¶101; also see ¶15 and ¶71) based on said digital signature information (see Nakano'222, ¶100; also see ¶73).

Nakano'222 does not specifically disclose instructions stored on a medium. Danneels does teach a computer-implemented method realized as one or more programs on a computer (see Danneels, col. 2, lines 40-46). In addition, Danneels teaches that the programs are storable on a computer-readable medium such as a floppy disk or a CD-ROM (see Danneels, col. 2, lines 46-49). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into Nakano'222

discussed in Claim 1. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of distribution and installation and execution of the software on another computer (see Danneels, col. 3, lines 46-49).

Nakano'222 does not specifically disclose an execution file, an apparatus including a processor, and inserting a medium into said apparatus. However, Nakano'222 does disclose medium connecting to the apparatus as prior art (see Nakano'222, ¶13) and Nakano'814 does teach an execution file (see Nakano'814, ¶664; also see ¶669), an apparatus including a processor (see Nakano'814, ¶201), and when a medium is inserted into said apparatus (see Nakano'814, ¶447-448). It would have been obvious to one of ordinary skill in the art at the time of the invention to include a processor in the apparatus because it quickly performs dynamic calculations. It would have been obvious to one of ordinary skill in the art at the time of the invention to react at the time of inserting a medium into an apparatus, because automation in executing a file reduces system idle time.

Nakano'222 does not specifically disclose encrypting digital signature. Matsuyama does teach encrypting digital signature information (see Matsuyama, ¶169). It would have been obvious to one of ordinary skill in the art at the time of the invention to encrypt digital signature because encryption increasing security of communication.

Further, Applicant is reminded that it has been held stored data is not functionally related to the memory in which it is stored and does not distinguish the claimed apparatus, method, and system from the prior art (*In re Gulack*, 217 USPQ 401 (Fed. Cir. 1983); *In re Ngai*, 70 USPQ2d (Fed. Cir. 2004); *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir.

1994); MPEP 2106.01). All the limitations in Claims 1 and 12 are directed to stored data, and are not given patentable weight for the purpose of prior art examination. In Claim 2, limitations following “wherein said second execution file includes ...” are not given patentable weight for the purpose of prior art examination. In Claim 5, limitations following “a second execution file for reproducing an encrypted content” are not given patentable weight for the purpose of prior art examination.

As to Claim 2, Nakano’222, Danneels, Nakano’814, and Matsuyama disclose the invention substantially as claimed. Nakano’222 further discloses unique key information is used to encrypt encryption key information for encrypting a content (see Nakano’222, see Nakano’222, ¶58; also see ¶84-89).

Further, the limitation “said unique key information is used to encrypt encryption key information for encrypting a content” merely present the intended use of unique key information. It has been held that manner or method in which machine is to be utilized is not germane to issue of patentability of machine itself (*In re Casey*, 152 USPQ 235 (CCPA 1967)). This limitation is not given patentable weight for the purpose of prior art examination.

As to Claim 3 and 6, Nakano’222, Danneels, Nakano’814, and Matsuyama disclose the invention substantially as claimed. Nakano’222 further discloses said encrypted content is recorded on said computer-readable storage medium (see Nakano’222, ¶47; also see Fig. 1).

Further, it has been held that a wherein clause that merely states the result of the limitations in the claim adds nothing to the patentability or substance of the claim (*Texas*

Instruments Inc. v. International Trade Commission 26, USPQ2d 1010 (Fed. Cir. 1993); *Griffin v. Bertina*, 62 USPQ2d 1431 (Fed. Cir. 2002); *Amazon.com Inc. v. Barnesandnoble.com Inc.*, 57 USPQ2d 1747 (CAFC 2001); MPEP §2106 II C). The limitations in Claims 3 and 6 are not given patentable weight for the purpose of prior art examination.

As to Claim 7, Nakano'222, Danneels, Nakano'814, and Matsuyama disclose the invention substantially as claimed. Nakano'222 further discloses encrypted content is recorded on said computer-readable storage medium (see Nakano'222, ¶47; also see Fig. 1) and second execution file can receive said encrypted content from said first execution file (see Nakano'222, ¶101; also see ¶15 and ¶71) based on said digital signature information (see Nakano'222, ¶100; also see ¶73).

Further, it has been held that a wherein clause that merely states the result of the limitations in the claim adds nothing to the patentability or substance of the claim ((*Texas Instruments Inc. v. International Trade Commission* 26, USPQ2d 1010 (Fed. Cir. 1993); *Griffin v. Bertina*, 62 USPQ2d 1431 (Fed. Cir. 2002); *Amazon.com Inc. v. Barnesandnoble.com Inc.*, 57 USPQ2d 1747 (CAFC 2001); MPEP §2106 II C). The limitations of Claim 7 are not given patentable weight for the purpose of prior art examination.

As to Claim 9, Nakano'222, Danneels, Nakano'814, and Matsuyama disclose the invention substantially as claimed. Nakano'222 further discloses encrypted content is recorded in information processing apparatus (see Nakano'222, ¶101; also see ¶15).

Further, it has been held that a wherein clause that merely states the result of the limitations in the claim adds nothing to the patentability or substance of the claim ((*Texas Instruments Inc. v. International Trade Commission* 26, USPQ2d 1010 (Fed. Cir. 1993); *Griffin v. Bertina*, 62 USPQ2d 1431 (Fed. Cir. 2002); *Amazon.com Inc. v. Barnesandnoble.com Inc.*, 57 USPQ2d 1747 (CAFC 2001); MPEP §2106 II C). The amended limitations of Claim 9 are not given patentable weight for the purpose of prior art examination.

As to Claim 10, Nakano'222, Danneels, Nakano'814, and Matsuyama disclose the invention substantially as claimed. Nakano'222 further discloses encrypted content stored in a different information processing apparatus (see Nakano'222, ¶59; also see ¶89).

Further, it has been held that a wherein clause that merely states the result of the limitations in the claim adds nothing to the patentability or substance of the claim ((*Texas Instruments Inc. v. International Trade Commission* 26, USPQ2d 1010 (Fed. Cir. 1993); *Griffin v. Bertina*, 62 USPQ2d 1431 (Fed. Cir. 2002); *Amazon.com Inc. v. Barnesandnoble.com Inc.*, 57 USPQ2d 1747 (CAFC 2001); MPEP §2106 II C). The amended limitations of Claim 10 are not given patentable weight for the purpose of prior art examination.

As to Claim 11, Nakano'222, Danneels, Nakano'814, and Matsuyama disclose the invention substantially as claimed. Nakano'222 further discloses second execution on an information processing apparatus (see Nakano'222, ¶100-101; also see ¶71).

Further, it has been held that a wherein clause that merely states the result of the limitations in the claim adds nothing to the patentability or substance of the claim ((*Texas Instruments Inc. v. International Trade Commission* 26, USPQ2d 1010 (Fed. Cir. 1993); *Griffin v. Bertina*, 62 USPQ2d 1431 (Fed. Cir. 2002); *Amazon.com Inc. v. Barnesandnoble.com Inc.*, 57 USPQ2d 1747 (CAFC 2001); MPEP §2106 II C). The amended limitations of Claim 11 are not given patentable weight for the purpose of prior art examination.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Butikofer et al., U.S. Patent No. 7,142,122 B2. Prior art discloses instructions can be stored on either medium or apparatus.

Sims, III, U.S. Patent No. 6,438,235 B2. Prior art discloses content protection using private key encrypted media content key.

Harada et al., U.S. Patent No. 6,850,914 B1. Prior art discloses access revocation based on unique media key encrypted content key.

Kamibayashi et al., U.S. Patent No. 7,137,012 B1. Prior art discloses medium key encrypted contents key.

Kurihara et al., U.S. Patent No. 7,570,762 B2. Prior art discloses authentication and content delivery.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMILE SU whose telephone number is (571) 270-7040. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CALVIN L. HEWITT can be reached on (571) 272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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October 27, 2009

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